# Groundwater Caucus Workshop Contemporary Groundwater Issues Council Update

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**Groundwater Resources Association of California** 



## **Contemporary Groundwater Issues Council**

#### Goal:

- Input to GRA's programming (board, committees) to identify needs and opportunities to network, communicate, and address important groundwater issues
- Provide an annual venue for executive networking and brainstorming "outside-of-the-box" on critical groundwater issues



## **Council Composition**

- 32 distinguished executives and leaders
- Range of disciplines and backgrounds
- Local, state, national & international levels
  - Regulatory agencies
  - Research and academic institutions
  - NGOs
  - Water agencies
  - Law and policy
  - Consultants



## 2011 Workshop - Reports & Next Steps





## 2011 Workshop – Results

#### 6 Key Issues - Group Discussions

- 1. Data management
- Conjunctive use/ IRWM
- Water quality impacts, including in areas with disadvantaged communities
- Managed aquifer recharge, including recycled water
- 5. Economics (value of water) and also regulatory consistency
- Contaminant cleanup & water resources management

#### **2011: Council Involvement**

#### 2011 Biennial GW Conference & GRA Annual Meeting

- Groundwater Recharge
  - Andrew Fisher (UC Santa Cruz)
- Groundwater Monitoring
  - Mary Scruggs (DWR)
- Groundwater Management
  - Rob Swartz (SGA/RWA); Tim Quinn (ACWA); Gina Bartlett (CCP)
- Nitrate in Groundwater
  - Pamela Creedon (RWQCB)
- Groundwater Remediation
  - Stewart Black (DTSC)



#### **2012: Council Involvement**

## **2012 Compounds of Emerging Concern** February 2012 GRA Symposium

- Andrew Eaton (MWH)
- Tom Johnson (ARCADIS)
- Bruce Macler (USEPA)

## Salt and Nitrate in Groundwater: Finding Solutions for a Widespread Problem

June 13 and 14, 2012 - Fresno

GRA in collaboration with CV-SALTS Initiative and Central Valley Regional Water Quality Control Board

- Pamela Creedon (RWQCB)
- Karl Longley (RWQCB)



#### **2012: GRA Committee Activities**

#### **Legislative Committee**

- Continue pursuit of data improvement and transparency through legislation
  - SB 1146 Well log public availability 2011-2012
  - AB 591 Hydraulic Fracturing protecting groundwater
  - GAMA-CASGEM web portal integration
- Annual Legislative Symposium
  - Raising the Bar on Groundwater Management
  - Improving data transparency
- Legislative Briefings and Meetings
  - GW101
  - Provide focused materials and information as needed



#### **2012: GRA Committee Activities**

#### **Events Committee**

- GRACasts (Series)
  - Wells well info, abandoned wells, data transparency
  - Groundwater Recharge mapping, characterization, cases
  - Planning Groundwater Data
- Fracking Symposium July 24<sup>th</sup> Long Beach
- Managing Wells In California Aug. 28-29 Sacto



#### **2013: GRA Committee Activities**

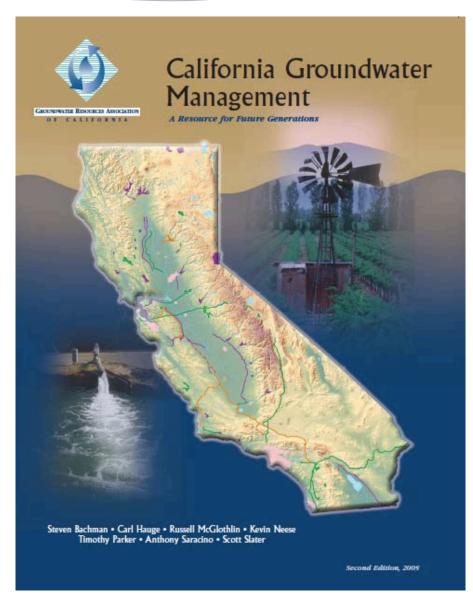
#### **Events Committee**

- Early Planning Groundwater Management Series
  - Managed Aquifer Recharge
  - Collaboration as a Tool
  - Monitoring and Data Integration
  - Groundwater Management Plan Preparation and Program Implementation



# 2013: California Groundwater Management Book Update

- Update Content
- Web-Based
- Need Sponsors





## Council March 28, 2012 Workshop: Key Topics for Group Discussions

#### Data

- Steve Phillips (USGS): Data Challenges
- Debbie Davis (Gov. Office Planning & Research): Data Policy

#### Groundwater Management

- Development of BMPs
- ACWA Framework Actions

#### Managed Aquifer Recharge

- Development of Statewide ASR Permit
- DWR/ACWA Statewide Inventory on MAR

#### Water Quality Impacts

- Thomas Harter (UCD): SBX2\_1 Nitrate Study
- Value of Water



## Council March 28, 2012 Workshop: Key Topics for Group Discussions

#### And Connections to California Water Plan Update 2013

- Groundwater Caucus
  - Tim Parker (Parker Groundwater), Caucus Co-Chair: Overview
- Water Plan Global Vision Process
  - Dan McManus (DWR): Overview



#### Data

- Learn from advanced data practices in other fields/states
- Interagency data-sharing agreements\*\*
- Adopt USGS web data-type portal approach
- Create authority/funding for state agency data integration\*\*
- Create State Interagency & Public Advisory Task Force\*\*
  - Flexible framework for data collection & management standards
  - Data links and integration through web portal semantic translator
- Provide online (web) access to basic data
  - For example, well logs consistent well identifiers, (accurate) location data, local water use data)
- Means to link GW data to subsurface system details

<sup>\*\*</sup> Consider Policy or Legislation



#### **Data Priorities (Preliminary)**

- Adopt USGS web data-type portal
- Create authority/funding for state agency data integration\*\*
- Provide online (web) access to basin data
  - For example, well logs consistent well identifiers, (accurate) location data, local water use data)
- Interagency data-sharing agreement
- Learn from advanced data practices in other fields/states

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#### **Groundwater Management**

- Continued groundwater communication & education efforts
- Adopt USGS web data-type portal approach
- BMPs & development of guidelines to establish new ones
- Added incentives for creating GMPs\*\*
- Incentives to improve agency coordination on water resources\*\*
  - GMPs, basin planning, IRWMPs, & land use
- Maintain Mandated Interagency Coordination of AB 599 Groundwater
   Quality Monitoring Act of 2001
  - Increase coordination among agencies that collect GW information as a priority
- Improved coordination between state & local agencies
- Streamline permitting & regulatory agency involvement in groundwater project planning & project implementation - examples

<sup>\*\*</sup> Consider Policy or Legislation



#### **Groundwater Management Priorities (Preliminary)**

- Incentives to improve agency coordination on water resources\*\*
  - GMPs, basin planning, IRWMPs, & land use
- Continued groundwater communication & education efforts
- Streamline permitting & regulatory agency involvement in groundwater project planning & project implementation - examples
- Improved coordination between state & local agencies

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#### **Water Quality Impacts**

- Educate & provide consistent message to public on relative risks of different constituents
- Develop partnerships: water districts & regulatory agencies
- Inclusion of public health agencies in differentiating between detection
   & consequence
- Inclusion of cost-benefit analyses in assessment of treatment options
- Facility reoperation that links GW storage with WQ concerns
- Reframe how GW recharge occurs on agricultural landscapes
- Create multidisciplinary technical committees to complement monitoring programs
- Site-specific agriculture pilot projects to evaluate BMPs and proxy measures for contaminants/non-point source discharges
- Enhance methods & tools that link evaluation of Quality & Quantity
- Integrate large programs in silos that deal with overlapping issues

#### Water Quality Impacts Priorities (Preliminary)

- Partnerships: water districts & regulatory agencies
- Educate & provide consistent message to public on relative risks of different constituents
- Enhance methods & tools that link evaluation of Quality & Quantity



#### Managed Aquifer Recharge (MAR)

- Adopt statewide groundwater recharge goals\*\*
- Consistent message on MAR benefits
- Remove characterization of source water (drinking water) as "waste"
   & recharge as "land disposal"\*\*
- Incentivize pilot/demonstration/full-scale groundwater recharge projects
- Remove restrictions/disincentives on use; create recharge incentives
- Clarify rights to storage space, credit for recharge, & adjacent landowner pumping\*\*
- Integrate different agency mandates regarding MAR\*\*
- Designate aquifer recharge as a beneficial use\*\*
- Incentivize agency coordination around GWMPs, basin planning, IRWMPs, & land use\*\*

<sup>\*\*</sup> Consider Policy or Legislation



#### **Managed Aquifer Recharge Priorities (Preliminary)**

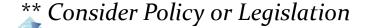
- Adopt statewide groundwater recharge goals\*\*
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- Integrate different agency mandates regarding MAR\*\*
- Incentives for agency coordination around GWMPs, basin planning, IRWMPs, & land use\*\*

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#### Value of Water

- Consistent message to regulatory community and water purveyors about supply benefits of stormwater
- Education of the public about the true costs & value of water
- Recognition of the water-energy nexus\*\*
- Alignment of state policies around establishing the value of water\*\*
- Integrated resource management efforts that highlight the value of water
- Statewide designation of high value priority uses of water\*\*



#### Value of Water Priorities (Preliminary)

- Education of the public about the true costs & value of water
- Integrated resource management efforts that highlight the value of water
- State designation of high value priority uses of water\*\*



<sup>\*\*</sup> Consider Policy or Legislation

## **Thank You and Questions**

